

## EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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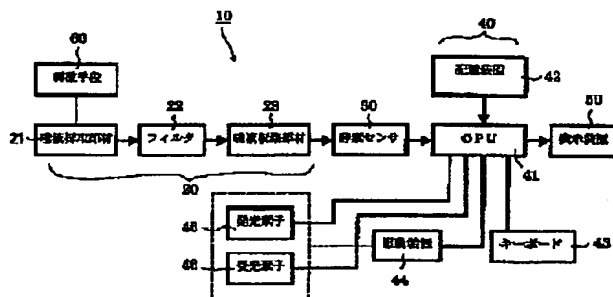
APPLICATION DATE : 29-08-95  
APPLICATION NUMBER : 07220672

APPLICANT : BROTHER IND LTD;

INVENTOR : YAMAGUCHI MASAKI;

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TITLE : BIOCHEMICAL SUBSTANCE  
ANALYSER



ABSTRACT : PROBLEM TO BE SOLVED: To provide a noninvasive biochemical substance measuring device excellent in measuring accuracy regardless of conditions of a living body.

SOLUTION: A collection part 20 is constituted of a saliva sampling member 21, a filter 22 and a saliva collecting member 23 and an operation part 40 is constituted of at least a CPU 41 and a memory device 42. Saliva being a substance to be measured is sampled in the collection part 20 and the current value  $I_0$  proportional to a predetermined biochemical substance in saliva is obtained by a sensor 30. The concn. of the biochemical substance in blood is calculated from the correlation between the concn. of glucose and blood sugar level preliminarily stored in the memory device 42. Herein, the secretory speed of saliva is accelerated by a stimulation means (Peltier element) 60. The saliva sampling member 21 measures saliva absorbing quantity by using a light emitting element 45 and a photodetector 46 and the secretory speed of saliva is calculated based on a saliva sampling time to be displayed and a degree of stimulation is regulated corresponding to the secretory speed to make the secretory speed constant.

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